

#1



1600

RAW SEQUENCE LISTING DATE: 05/08/2002
PATENT APPLICATION: US/09/720,384A TIME: 17:30:19

Input Set : A:\BB-1167-B USPCT Corrected Seq List 02.txt
Output Set: N:\CRF3\05082002\I720384A.raw

3 <110> APPLICANT: Falco, Saverio
 4 Allen, Stephen
 5 Anderson, Shawn
 7 <120> TITLE OF INVENTION: Genes Encoding Sulfate Assimilation Proteins
 9 <130> FILE REFERENCE: BB-1167-B
 11 <140> CURRENT APPLICATION NUMBER: 09/720,384A
 12 <141> CURRENT FILING DATE: 2000-12-21
 14 <150> PRIOR APPLICATION NUMBER: 60/092,833
 15 <151> PRIOR FILING DATE: 1998-07-14
 17 <160> NUMBER OF SEQ ID NOS: 14
 19 <170> SOFTWARE: Microsoft Office 97
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 890
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Zea mays
 26 <400> SEQUENCE: 1
 27 ggtcggcg ggcggccgtc gcagggatca gcacgacgac cagcgcgcgt gtgacactcg 60
 28 ccgtcgggaa atccacgac acatctgtgc atgatgcgc catcgccgag aaggagccg 120
 29 aagggtctgtc gaaccagaag ggtctgcgtc ttgtttatcac tggcttaaagc gtttcaggga 180
 30 aaaggacgct cgcgtgcggc ctgacgcgcgc agctgcacgg cagaggccac ctcacgtacg 240
 31 tcctcgccg agccaaacactt aggacgcggc tgaacagggg ctcctatcc ggacgaggag 300
 32 accggccgcga gaaatccgcg agatgtgggg aatagtcggaa gcttgcgc acgtgcggcc 360
 33 tcgtctgcgt cgccggccatc atatcgccctt acatggacggc cccaaaggccg tgtcgcgcgtc 420
 34 tgctgcggcca gcaactgtttt atcgatgttgc ttcttgacgtt ggcgttccaa tggtgcgaag 480
 35 ccaggggaccc caaaggccctc tacaagctcg cacgcgcggg caaaatcaaagg ggttccacgg 540
 36 gcatgcggca tccttcggaa ccggccgtcg actgtggatg atgtatcccg tgtaaaatgcg 600
 37 ggcgtccgcg ttccgttca tcgtatgtcg tgcacgttgt gtgtacttccggacgacatcg 660
 38 gtttccatcca ggactagacca tggaaatggca tcgtatgtcg tggatgttat atatgttagca 720
 39 gcaaggccgg agccatgtgc aaggctgtgtt aatcttcatcg ctgtttttctt cttaaagacc 780
 40 aaaaacaaacaa agatgtggca gtgtttttttt gaaaaaaaaaa acatgcgtcg acagatgtcg 840
 41 ttaataatccg atgtttttttt taaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 890
 43 <210> SEQ ID NO: 2
 44 <211> LENGTH: 224
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Zea mays
 48 <400> SEQUENCE: 2
 49 Ser Ala Ala Ala Ala Val Ala Gly Ile Ser Ser Ser Ser Ala Leu
 50 1 5 10 15
 52 Val Thr Ser Thr Val Gly Lys Ser Thr Asn Ile Leu Trp His Glu Cys
 53 20 25 30
 55 Ala Ile Gly Gln Lys Glu Arg Gln Gly Leu Leu Asn Gln Lys Gly Cys
 56 35 40 45
 58 Val Val Trp Ile Thr Gly Leu Ser Gly Ser Gly Lys Ser Thr Leu Ala

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Output Set: N:\CRF3\05082002\IT20384A.raw

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PATENT APPLICATION: US/09/720,384A DATE: 05/08/2002
TIME: 17:30:19

Input Set : A:\BB-1167-B USPCT Corrected Seq List 02.txt
Output Set: N:\CRF3\05082002\I720384A.raw

121 <212> TYPE: PRT
122 <213> ORGANISM: Zea mays
124 <400> SEQUENCE: 4
125 Arg Pro Phe His Phe Ile Asn Gln Thr Glu Pro Leu Val Thr His Thr
126 1 5 10 15
128 Gln Gln Pro Pro Ser Pro Ala Pro Gly Pro Ala Ser Gln Gly Gln Arg
129 20 25 30
131 Gln Gly Asn Thr Leu Leu Ser Pro Thr Pro Thr Leu Ala Val Ile Leu
132 35 40 45
134 Val Asn Pro Gln Arg Ala Pro Pro Val Leu Pro Gly Leu Thr Pro Ser
135 50 55 60
137 Asp Ala Pro Leu Pro Ala Leu Val Ile His Gly Leu Thr Pro Arg Ser
138 65 70 75 80
140 Ser His Ser Ser Ala Gly Leu Ala Ser Asp Ser Gly Arg Arg Arg Gly
141 85 90 95
143 Glu Gly Arg Gly Ala Arg Thr His Cys His Arg Gly Ile Gly Arg Trp
144 100 105 110
146 Val Arg Arg Arg Arg Asn Gly Ala Ala Pro Gly Glu Ala Pro His
147 115 120 125
149 Ser Pro Val Lys Glu Lys Pro Val Met Ser Asn Ile Gly Lys Ser Thr
150 130 135 140
152 Asn Ile Leu Trp His Asn Cys Leu Ile Gly Gln Ser Asp Arg Gln Lys
153 145 150 155 160
155 Leu Leu Gly Gln Lys Gly Cys Val Val Trp Ile Thr Gly Leu Ser Gly
156 165 170 175
158 Ser Gly Lys Ser Thr Leu Ala Cys Ala Leu Ser Arg Glu Leu His Cys
159 180 185 190
161 Arg Gly His Leu Thr Tyr Val Leu Asp Gly Asp Asn Leu Arg His Gly
162 195 200 205
164 Leu Asn Arg Asp Leu Ser Phe Lys Ala Glu Asp Arg Ala Glu Asn Ile
165 210 215 220
167 Arg Arg Val Gly Glu Val Ala Lys Leu Phe Ala Asp Ala Gly Val Ile
168 225 230 235 240
170 Cys Ile Ala Ser Leu Ile Ser Pro Tyr Arg Arg Asp Arg Asp Ala Cys
171 245 250 255
173 Arg Ala Leu Leu Pro His Ser Asn Phe Ile Glu Val Phe Ile Asp Leu
174 260 265 270
176 Pro Leu Lys Ile Cys Glu Ala Arg Asp Pro Lys Gly Leu Tyr Lys Leu
177 275 280 285
179 Ala Arg Thr Gly Lys Ile Lys Gly Phe Thr Gly Ile Asp Asp Pro Tyr
180 290 295 300
182 Glu Pro Pro Ile Asn Gly Glu Ile Val Ile Lys Met Lys Asp Glu Glu
183 305 310 315 320
185 Cys Pro Ser Pro Lys Ala Met Ala Lys Gln Val Leu Cys Tyr Leu Glu
186 325 330 335
188 Glu Asn Gly Tyr Leu Gln Ala
189 340
191 <210> SEQ ID NO: 5
192 <211> LENGTH: 431

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/720,384A

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Input Set : A:\BB-1167-B USPCT Corrected Seq List 02.txt
Output Set: N:\CRF3\05082002\I720384A.raw

193 <212> TYPE: DNA
194 <213> ORGANISM: Oryza sativa
196 <220> FEATURE:
197 <221> NAME/KEY: unsure
198 <222> LOCATION: (48)
199 <223> OTHER INFORMATION: n = A, C, G or T
201 <220> FEATURE:
202 <221> NAME/KEY: unsure
203 <222> LOCATION: (346)
204 <223> OTHER INFORMATION: n = A, C, G or T
206 <220> FEATURE:
207 <221> NAME/KEY: unsure
208 <222> LOCATION: (431)
209 <223> OTHER INFORMATION: n = A, C, G or T
211 <400> SEQUENCE: 5
W--> 212 cttacacaga gatcaggta aacagtggc gagaacaag ttttgcanaat gtcatcaatt 60
213 gtgcggaaagg cgtccaaatct ctctcgcat gattgtgcag tgccggcagg tgatccggcag 120
214 aaacctactga agcagaaaagg ttgcgttgg tggatcacag gacttagtggtt tcaggtaaa 180
215 agtaccctgg catgcacatc agatcgagat ccggatcacaa gagggaaaggctt ttcgttatgtt 240
216 ctgtatggtc ataataatggat acatggtttgg aacaaggatc ttggctttaa ggccggaaagac 300
W--> 217 cgtgtgaaa atatacgccaa agttgttgag gtagcaaagc tatttcnccaga tgcaagccctaa 360
218 gtagatggc caatgttccaa atctccctat aagagagaac gtgagtcctg gcccctgcata 420
W--> 219 attgtcaaat n 431
221 <210> SEQ ID NO: 6
222 <211> LENGTH: 118
223 <212> TYPE: PRT
224 <213> ORGANISM: Oryza sativa
226 <220> FEATURE:
227 <221> NAME/KEY: UNSURE
228 <222> LOCATION: (98)
229 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
232 <400> SEQUENCE: 6
233 Ser Ile Val Pro Lys Ala Ser Asn Ile Phe Trp His Asp Cys Ala Val
234 1 5 10 15
235 Gly Gln Ala Asp Arg Gln Lys Leu Leu Lys Gln Lys Gly Cys Val Val
236 20 25 30
237 39 Trp Ile Thr Gly Leu Ser Gly Ser Gly Lys Ser Thr Leu Ala Cys Thr
238 35 40 45
242 Leu Asp Arg Glu Leu His Thr Arg Gly Lys Leu Ser Tyr Val Leu Asp
243 50 55 60
245 Gly Asp Asn Leu Arg His Gly Leu Asn Lys Asp Leu Gly Phe Lys Ala
246 65 70 75 80
248 Glu Asp Arg Ala Glu Asn Ile Arg Lys Val Gly Glu Val Ala Lys Leu
249 85 90 95
251 Phe Xaa Asp Ala Ser Leu Val Cys Ile Ala Ser Phe Lys Ser Pro Tyr
252 100 105 110
254 Lys Arg Glu Arg Glu Ser
255 115
257 <210> SEQ ID NO: 7

RAW SEQUENCE LISTING DATE: 05/08/2002
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/08/2002
PATENT APPLICATION: US/09/720,384A TIME: 17:30:20

Input Set : A:\BB-1167-B USPCT Corrected Seq List 02.txt
Output Set: N:\CRF3\05082002\I720384A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 48,346,431
Seq#:6; Xaa Pos. 98